**SUPPLEMENTARY TABLE. Estimated vaccine effectiveness against hospitalization with COVID-19 after previous SARS-CoV-2 infection that was confirmed by nucleic acid amplification test only* — United States, June 2021–February 2022**

| Vaccination status | No. case-patients† | No. control-patients† | VE§ (95% CI) | |
|---|---|---|---|---|
| | N = 2,146 | N = 4,887 | Unadjusted | Adjusted |
| Unvaccinated (Ref) | 1,352 | 2,498 | — | — |
| Any mRNA vaccine, one dose¶ | 102 | 277 | 32.4 (11.8–48.2) | 33.2 (12.4–49.0) |
| Any mRNA vaccine, two doses¶ | 551 | 1,543 | 38.2 (28.8–46.4) | 40.3 (30.6–48.6) |
| Pfizer-BioNTech¶ | 299 | 891 | 45.5 (33.9–55.1) | 48.3 (36.9–57.7) |
| Moderna¶ | 252 | 652 | 26.1 (8.56–40.3) | 28.8 (11.0–42.9) |
| Any mRNA vaccine, booster dose¶ | 141 | 569 | 61.3 (51.1–69.3) | 61.6 (51.4–69.7) |

**Abbreviations:** NAAT = nucleic acid amplification test; Ref = referent group; VE = vaccine effectiveness.

* Initial diagnosis was based on a previous positive SARS-CoV-2 NAAT result >90 days before the date of the NAAT associated with subsequent hospitalization.

† Cases had a positive NAAT performed between 10 days before through 3 days after the date of hospital admission with a diagnosis of COVID-19-like illness; controls had a negative NAAT result. COVID-19–like illness diagnoses were defined based on other methods (https://www.nejm.org/doi/full/10.1056/nejmoa2110362) and included acute respiratory illness (e.g., COVID-19, respiratory failure, or pneumonia) or related signs or symptoms (e.g., cough, fever, dyspnea, vomiting, or diarrhea) using diagnosis codes from the *International Classification of Diseases, Tenth Revision*. Patients were eligible for inclusion if the hospitalization-associated SARS-CoV-2 NAAT was performed during June 20, 2021–February 24, 2022.

§ VE was calculated as ([1−odds ratio] x 100), estimated using conditional logistic regression in a test-negative design after matching by 2-week calendar period of NAAT associated with hospital admission, 10-year age group, and state of residence. Adjusted estimates accounted additionally for measured differences in sex, race/ethnicity (White race: yes/no and Hispanic ethnicity: yes/no), number of clinical encounters during 2019 (0, 1–9, or ≥10), number of underlying conditions (0, 1, or >1), and days since previous infection.

¶ Patients were categorized on the date of the NAAT associated with hospitalization as: 1) unvaccinated, if no COVID-19 vaccine had been received; 2) after dose 1, if ≥14 days had elapsed since receipt of the first dose of an mRNA COVID-19 vaccine, and no subsequent dose had been received; 3) after dose 2, if ≥14 days had elapsed since receipt of a second mRNA vaccine dose, and no third dose had been received; or 4) after a booster dose, if ≥14 days had elapsed since receipt of an mRNA booster dose administered ≥5 months after a second dose. Patients were excluded from the analysis if they received a non-mRNA vaccine, the day of the NAAT associated hospitalization was <14 days after dose 1, dose 2 or a booster dose, dose 2 was <14 days after dose 1, any booster dose was <5 months after dose 2, they received >3 doses of vaccine, or their previous positive NAAT result or COVID-19 diagnosis was after the date of the most recent vaccine dose.